

Claims

*Subj*

*NOTE 30 - OUT 447650*

1. Method for drying and keeping dry especially rolled strip (cold-rolled strip) up to approximately 10 mm thickness, preferably less than 0.2 mm thickness, in the delivery area of cold-rolling and strip-rolling plants, in which, for separating the damp area (35) of the rolling mill relative to the further delivery area downstream of the last roll stand, the dry area (34), a partition is arranged whose upper part above the strip (10) extends up to the stand platform and whose lower part below the strip (10) extends down to the base plate, characterized in that the strip (10) is subjected, by the ends of the partition (12, 13) facing the strip and its components (14, 15, 16, 16', 17, 17'), to a gas under pressure, preferably air, at a right angle to the strip surface from above and from below via blast nozzles (23), so that across the entire strip width an air cushion-like compressed gas buffer is generated in the gap (30) between the ends of the partition (12, 13; 14, 15) facing the strip and the upper and lower strip surfaces, the gap having a width of 0.1 to 1 mm, preferably 0.2 mm, and the compressed gas (33) is guided away above and below the strip (10) parallel to the strip surface in the form of a split flow (32) in the direction toward the rolling mill or the damp area (35) and of a split flow (31) in the opposite direction toward the dry area (34).
2. Method according to claim 1, characterized in that the compressed gas (33) is guided at a pressure of approximately 1 to 10 bar, preferably of approximately 5 bar, from below and above onto the strip surface.
3. Device for performing the method according to the preceding claims, comprised of a partition (12, 13) stationarily arranged

above and below the strip (10) whose upper part (12) above the strip (10) extends up to the stand platform and whose lower part (13) below the strip (10) extends down to the base plate, as well as a movable partition (16, 16', 17, 17') which extends the stationary partition (12, 13) by means of frames (14, 15) to a location closely above and below the strip surface, characterized by blast nozzle bars (18, 19) arranged at the end (16', 17') of the movable partitions facing the strip across the entire strip width having blast nozzles (23) oriented perpendicularly onto the strip surface and blast nozzle surfaces formed facing the strip and extending parallel to the strip surface.

4. Device according to claim 3, characterized in that the length of the blast nozzle bars (18, 19) corresponds at least to the strip width and the width of the blast nozzle bars (18, 19) is approximately 10 mm to 500 mm, preferably approximately 60 mm.
5. Device according to claim 3 or 4, characterized in that, per 1 m of blast nozzle bar length, approximately 250 blast nozzles (23) with a nozzle diameter of approximately 1 mm are arranged in the blast nozzle bars (18, 19).
6. Device according to claim 3, 4 or 5, characterized in that the blast nozzles (23) are arranged in the blast nozzle strips (18, 19) centrally relative to the blast nozzle bar width and successively transversely across the entire strip width.
7. Device according to one or several of the claims 3 to 6, characterized in that the gap (30) between the surfaces of the strip (10) and the blast nozzle bar surfaces facing the strip has a width of 0.1 to 1.0 mm, preferably approximately 0.2 mm.